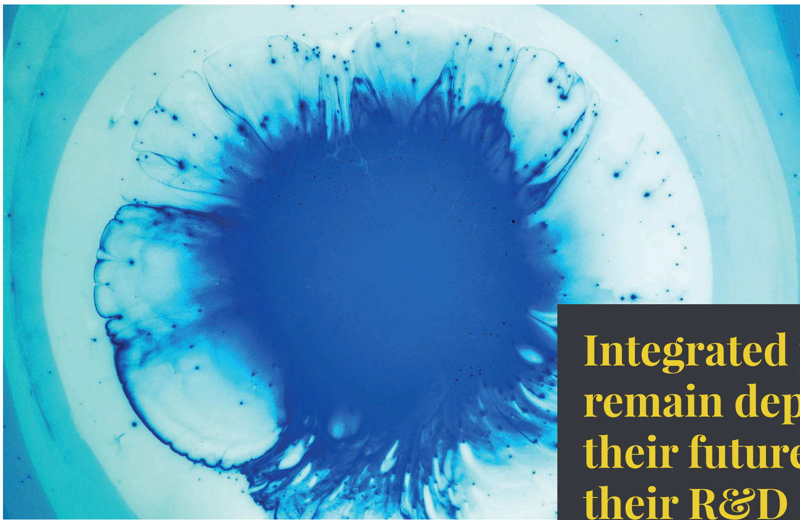
Novasecta

INSIGHTS

# Manage R&D to Create Value

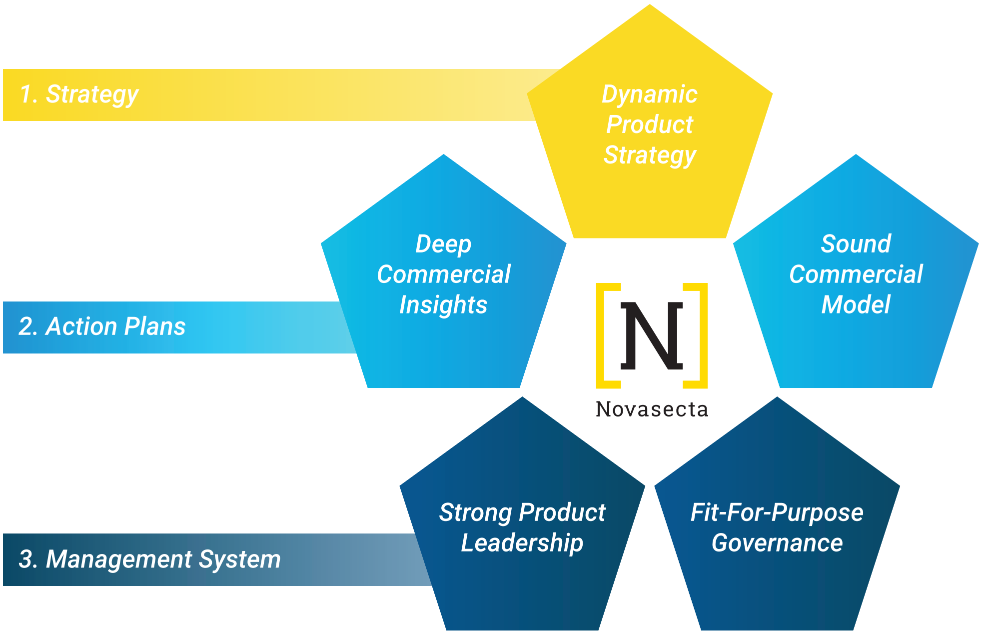


**Integrated pharmaceutical companies remain dependent on R&D to create their future products, but they know that their R&D model can always be better.**

In 2010, Morgan Stanley urged pharmaceutical companies to "Exit Research and Create Value": an attractive proposition for those executives who had been seeing R&D consume enormous resources while generating limited returns. The reality today is more complicated. Integrated pharmaceutical companies remain dependent on R&D to create their future products, but they know that their R&D model can always be better. For all but the very largest pharmaceutical companies the option to acquire de-risked or near-market assets is unattractive given prohibitive capital requirements. So excellent R&D is as essential to pharmaceutical companies' success as it always has been. It is simply too dangerous to hope that others will constantly produce compounds and drugs in your chosen commercial area at a price that is affordable to in-licence or acquire. Pharma companies need to manage R&D to create value.

Managing pharmaceutical R&D is hard. It is a complex system that integrates science, people and money in the hope of creating amazing medicines. Potential products can and do simply fail completely after years of work and tens or hundreds of millions of Euros of investment. This makes R&D both extraordinarily valuable when it works, and frustratingly disappointing when it doesn't. Every pharmaceutical company knows deep down that its R&D could be better, and wants it to be better. The temptation is then to see the "grass as greener" outside the internal organisation, and somehow solve the R&D problem by buying it from outside. Novasecta firmly believes that an excellent internal R&D organisation has the potential to create better products faster than leaving R&D to others. Pharma companies need to actively manage R&D to create value.

**Management of R&D requires attention to strategy, action plans, and the management system**




Managing R&D effectively requires us to find ways to “eat the elephant in bite-sized chunks”. Clearly having a reality-based and dynamic strategy is pivotal, but it is only when strategy moves from fine words to action plans with concrete measures and goals that it becomes effective. And such action plans need a coherent management system to move the action plans into reality. Through these three layers of managing R&D we see five particularly difficult dimensions that drive R&D productivity, as illustrated in the figure above. Below we discuss these in turn.

## 1. Create a dynamic R&D strategy in your own reality

Great strategies are clear, communicated and understood within the organisation. They are also realistic and feasible. It is imperative that an R&D strategy accounts for the strengths and weaknesses of the organisation, so that strengths can be fully leveraged and weaknesses addressed acknowledged and dealt with. It must also constantly adjust to rapid changes in the market environment. Dynamic strategy is the hallmark of sustainable success.

The Swiss mid-sized pharmaceutical company Actelion is one example of a company with a clear R&D strategy that was built on a deep understanding of its distinctive R&D capabilities. Actelion's R&D was built from combining world-class expertise in rational drug design, cardiovascular research, an understanding of the endothelium, and small molecule development. This was initially successfully applied to develop strong product offerings in the pulmonary arterial hypertension (PAH) space. On the back of commercial success in PAH with Tracleer and Opsumit, Actelion then dynamically changed: leveraging its R&D platform to develop assets across multiple new therapy areas through a single R&D centre that uses a high degree of medical input to select attractive future franchises. Such a repurposing and amplification of an organisation's existing strengths are the foundation of effective R&D strategy, and can significantly improve the chance of repeating single-product successes.

## 2. Good strategy must cascade to action plans

The two most important areas where translating R&D strategy into action plans can be most effective are portfolio balance and sources of innovation. The focus on a balanced portfolio is deliberate: an R&D organisation that is not centred around and constantly planning its portfolio and projects is one that will have difficulty bringing products to market. And the importance of engaging diverse sources of innovation internally and externally cannot be underestimated.

Clear action plans, practical things that the organisation will do differently, are therefore required to define the set of activities that will enable the R&D organisation to access multiple sources of innovation and place them into an appropriately balanced portfolio.

One example of an organisation that has sought and brought in ideas from a multitude of sources is family-owned Boehringer-Ingelheim. Following successes through external collaborations, in November 2015, Boehringer-Ingelheim publicly pledged an investment of €11 billion into R&D over five years, with 30% of its planned €5bn pre-clinical investment earmarked for collaborations with external partners. Taking action with a clear goal to increase collaborations through open innovation while maintaining internal R&D capabilities increases speed, flexibility and provides rapid access to new technologies and therapeutic areas.

Shaping the fruits of innovation into a well-balanced portfolio is crucial to managing risk and productivity in R&D. Genmab has built a balanced portfolio on the back of its recognised strength in antibody technologies. This consciously planned technology platform approach has generated numerous unique assets at each phase of clinical development, and almost all have multiple additional indications. The intention is to partner these assets during later stage development, capitalising on a partners experience in various medical areas.

The actions of companies like Boehringer-Ingelheim and Genmab are evidence that inspiring strategic words can and do get translated into action plans that drive action to create value. Whether sourcing external innovation of building a balanced R&D portfolio, pharmaceutical companies can and should specify concrete action plans to make sure this happens.

## 3. The management system will make or break any strategy and action plan

The best strategies and plans need a management system that enables them to get done. A management system is a complex combination of organisation, processes, culture, governance and people. But there are two dimensions that have the potential to make or break good strategy and action plans: project leadership and governance.

Successful companies have broken the perhaps inexorable habit of people in organisations creating functional silos by putting in place strong project leadership. This is certainly easier said than done: old habits die hard and the comfort of a line management position with functional responsibility is a different world from the uncertainty and accountability of project progression.

Successful R&D organisations therefore adopt a project-led mindset, recognising projects as the source of true value in R&D. In these organisations, functional resources are deployed on an as needed basis to secure project success. Creating a culture that recognises the inherent value of projects over functions is crucial. Without naming names we have helped several pharmaceutical companies to make this mindset shift, for example through a lean R&D model with significant levels of externalisation and very senior and capable project leaders. These leaders are fully supported by slim senior governance bodies to get the necessary resources required to drive projects forward. Importantly the whole organisation appreciates that this flexibility is an absolute prerequisite for speed and success.

Similarly fit-for-purpose governance may sound simple but is frustratingly hard to pull off. Even the word “governance” has overtones of bureaucracy, too many people, and endless committee meetings and powerpoint. Fit-for-purpose governance on the other hand brings only the right people to the table at the right time, and has a dynamic flavour that enables decisions to be made with the speed and quality that they deserve. Done right this can drive continuity, reinforce the R&D strategy and measure progress against the agreed action plans. We have worked with several companies to re-create and simplify R&D governance mechanisms to maintain clear oversight of progress and speed-up decision-making. Crucial to the success of these new decision-making groups is an extremely focused remit and buy-in and communication with senior corporate management.

## Addressing the five dimensions of managing R&D will increase value

The essential job of managing R&D to create value means (a) creating a reality-based strategy, (b) making it real through action plans for the portfolio and sources of innovation, and (c) creating a management system with strong project leadership and fit-for-purpose governance.

So managing R&D to create value is not as quick or simple as “exiting research to create value”. But it is for sure a more powerful way to create the fantastic medicines that will benefit patients and sustain the future of a pharmaceutical company. It is well worth the effort.